IN SENATE OF THE UNITED STATES.

JUNE 15, 1848.
Submitted, and ordered to be printed.

Mr. Felch made the following

REPORT:

[To accompany bill S. No. 283.]

The Committee on Public Lands, to whom were referred the petition of Orville B. Dibble and George C. Bates, asking for the right of way, together with a grant of land to aid in the construction of a canal around the Falls of St. Mary's, and also the joint resolutions of the legislature of Michigan on the same subject, respectfully report:

The canal contemplated by the petitioners is designed to connect the waters of Lake Superior with those of Lake Huron, and to enable vessels to pass without interruption from the latter to the former. The obstruction caused by the Falls of St. Mary's, now completely barring all communication by navigation with the largest sheet of fresh water on the earth, may be surmounted by a canal only about three-fourths of a mile in length. The land here, on the American shore, is owned by the United States, and is held as a military reservation. Over this space the petitioners ask the right of way for a canal. They also solicit a grant of land to aid in the construction of the work.

The attention of Congress was at an early period called to the national importance of this work, and the citizens of several of the States bordering on the great lakes joined in petitioning for the aid of government in its construction. In 1837, the legislature of Michigan, anticipating much delay in the action of Congress on the subject, undertook the construction of the canal, and caused a survey and an estimate of the expenses to be made, and, in 1839, actually commenced the excavation. The agents and laborers in the employment of the State were, however, driven from the ground by the military power of the United States. The subsequent embarrassment of the treasury prevented any further prosecution of the enterprise by State authority, and the work has never been resumed.

In 1844, the subject underwent an investigation by the Committee on Roads and Canals, who made a report recommending the construction of the canal by the government of the United States.

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"The indispensable importance of the proposed canal;" the committee remark in their report, "in a military and naval point of view, seems so evident to the committee, that they cannot deem it wise in Congress any longer to delay its construction. Frontier security, even in time of peace, imperatively demands it. That the country lying south of Lake Superior is destined to a course of rapid settlement, there can no longer be a doubt. Its northern shores swarm with numerous hordes of savages in the interest of. because subsidized by, the British government. Our own settlements will be more contiguous to such an Indian border than during any period of our history. A necessity will at once arise for advancing our military posts as far as the head of the lake, and eventually beyond it, to cover and protect them, as well as to insure safety in our intercourse with various remote tribes to whom we are bound by existing treaty stipulations. A war with England, however much to be deprecated, and avoided, too, so far as the preservation of our national rights and honor may enable us to avoid it, is yet an event which, owing to our frontier position with reference to her American possessions, we should be prepared to meet, by the adoption of every precautionary measure calculated to insure an exemption from the desolating and murderous ravages to which our northwestern border was exposed during the late contest. In such an event, the shores of Lake Superior, without this improvement, will be what those of Erie, Huron, and Michigan, were-the scene of foreign conquest, of merciless Indian massacres, perhaps of national dishonor and shame. It was the glorious achievement of Perry which, by sweeping the flag of England from those inland seas, led to the expulsion of a foreign invader from the soil of Michigan, and the scourging of his red allies back forever to their foreign fastnesses. Without a naval force on Lake Superior, the defence of that country would be impracticable. The building and equipping of a separate fleet for that purpose would therefore become unavoidable, and at a cost far beyond what would be required to open this proposed communication. The Hudson Bay Company are supposed to have at least two thousand employées and engagées in its service, in the northwest, possessing an unbounded influence over all the Indian tribes with whom they are associated, who cherish a deep and irreconcilable hate towards the people of the United States. In the event of hostilities, it may be safely estimated that thirty thousand warriors might, and doubtless would, if necessary, be concentrated on that portion of our frontier. How indispensable is it, then, that this influence and this spirit should be kept down and overawed, even in time of peace, by such an array of the means of protection as the opening of this canal would enable us at once to throw into that vast lake.

"There has recently been built, on Lake Erie, an iron steam frigate, to the dimensions of which this canal is proposed to be adapted. Its usefulness, except for the purposes of experiment and nautical discipline, will be almost wholly nominal in time of peace, unless it can have access to Lake Superior, for the object above indicated; and the settlement of the country will soon demonstrate

the necessity of a protection against smuggling, which can only be had by giving the United States revenue cutter the same facility."

The group of fresh water lakes, of which those above mentioned form a part, present one of the grandest features of physical geography. With a line of coast embracing about 5,000 miles, they are surrounded by a region of the richest soil, with a climate generally temperate and healthy. It is, however, only recently that the increased facilities of ingress and egress, and the advantages of communication with foreign markets, have invited an industrious population to their borders, and increased to an astonishing amount the exports of the country. The opening of the Erie canal through the State of New York was the first important measure for the prosperity of the region of which we speak. This secured at once to the whole country bordering upon all of these inland seas, with the exception of Lake Superior, the advantages of water communication with eastern markets, and with the ocean. The commerce of these lakes has consequently exhibited an increase almost without a parallel. In 1846, as appears by a report from the War Department, made to the Senate in December last, the total value of imports and exports on the great lakes amounted to \$61,914,910. The tonnage of American vessels engaged in this commerce is reported at 106,838, employing 6,972 mariners. The cost of these vessels was about \$6,000,000, and the annual expense of manning them is estimated at \$1,750,000. Add to this the tonnage of the British shipping on the several lakes, ascertained to be 46,575 tons, and the passenger trade, amounting to at least \$1,250,000, received for not less than 250,000 passengers in the year, and we have an imperfect view of the immense business of the great American lakes, and the resources of the region bordering upon them. The average rate of increase, which has been for the last five years over 17 per cent., will enable us to approximate its future amount.

Every channel of communication which has heretofore been opened between the east and the unsettled portion of the west, has had the effect to introduce purchasers of public lands, to change the wilderness to cultivated fields, and to add to the wealth of the

country, by increasing the fruits of productive labor.

Lake Superior is the only one of the great lakes which is excluded from the benefits of a connexion by navigable waters with all the others. The Falls of St. Mary's interpose the only obstruction, yet they as effectually close its entrance to all intercourse by

navigation as if no stream divided its hills.

Until recently, the country bordering on the upper lake, continuing in its wilderness state, afforded few productions demanding an outlet for vessels. It was not until 1837 that the true importance of the Lake Superior country became the subject of public attention. In that year the legislature of Michigan passed an act authorising a geological survey of the State, and making a large appropriation for that purpose. The charge of this survey was committed to Dr. Douglass Houghton, a man of superior scientific information, and of indomitable energy and perseverance. His re-

ports exhibited the resources of the country on the upper lake in a new light. The early travellers in that country had obtained on the shores of the lake detached specimens of native copper, and the examination of the geologist showed it to be one of the richest mining countries in the world. In copper and iron the ores are unsurpassed in richness, and apparently inexhaustible in quantity.

The region of country in question was ceded to the United States by treaty with the Chippewa Indians in 1842, and in April, 1843, an agent was appointed by the War Department to visit the country, and to ascertain and designate the line of the mineral district. He was also empowered to grant permits to search for minerals, with the right to the persons receiving them to obtain leases subsequently for the premises. On the 6th May, 1846, the issuing of permits and leases was suspended. The whole number of leases granted previous to that time was 480. The whole number of permits and personal applications for loccations was about 1,000. The leases covered tracts of land some one and some three miles square, and secured to the government a per centage of all ores taken from the mines.

From the commencement of the mining operations to the 30th September, 1847, there had been raised from the mines 10,242,200 pounds of ore and metal. Of this, 1,693,805 pounds were shipped and sent out of the country for smelting. After making liberal deductions for such portion as was of little value for smelting, the quantity dug out and remaining at the mines to be smelted when the proper works should be erected, is estimated at 7,225,395 pounds; which would produce, in pure copper in the refined state, from ten to 20 per cent. Of this amount, when smelted, the government will be entitled, under the terms of the permits and leases, in copper or money, to some eight or ten thousand dollars. The total receipts into the treasury for rents of this character, according to the estimates of the officers having charge of the same, will

amount, on the 30th September next, to some \$30,000.

This glance at the mining operations on Lake Superior exhibits at once the interest which the recent developements in that country have excited in the public mind, and the value of its mineral resources. That these are destined to open the way for extensive and profitable occupation of labor and capital, to draw to the shores of this northern lake a numerous population, to supply to the markets of the world an abundance of a metal which has hitherto been found in few localities where it could be worked by miners with profit, is too evident to be doubted. And yet it is apparent that these advantages, so conducive to the public weal, cannot be secured while the water communication between Lake Superior and the lakes below it is cut off by the obstruction at the entrance of the former. Through this entrance all transportation of metal and merchandise must pass. The transhipment at the falls, and land carriage around them, would impose a burden so heavy as to prostrate the enterprise, and destroy the advantages of the wealth which is found in that northern region. It would most assuredly

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prevent both the working of the mines and the settlement of the

country

The United States have an interest in this enterprise, direct and specific. The title to the lands throughout the whole pen insula south of Lake Superior is yet in the government. The public surveys have but recently been commenced there, and an office for the sale of lands has been opened only within the last few weeks. The whole region is the property of the government. The same enlightened policy which has heretofore dictated all proper measures to effect the sale of the public domain, and to speed the advance of civilized society into the wilderness, would seem to require that the work under consideration, without which the business and the settlement of an extensive region must be retarded, or perhaps altogether renounced, should receive the aid of the government.

In the report to the Senate, above mentioned, the committee further say, that the undertaking in question "is commended by the highest considerations to national favor, and ought to be prosecuted at none other than the national cost. Lake Superior has a coast within American territory of 600 to 700 miles in extent, the whole of which is a boundary of the public domain of the United States. It is, as its name imports, the largest lake in the known world. It is indented with numerous natural harbors, and, in that respect, possesses advantages for the safety and protection of commerce and navigation far greater than are enjoyed on either of the great lakes forming the chain with which we now propose to connect it. A navigable access to it will cause its broad expanse of waters, which now roll in solitary majesty, bearing on their surface but little else than the light bark of the savage, to afford, in future times, a noble theatre for commercial enterprise, as well as for nautical discipline and adventure. It will bring into market, with a rapid demand for sale, a region embracing twenty millions of acres of the public lands, abounding in extensive fertile tracts and in exhaustless mineral wealth, which now repose in all the wildness of unreclaimed nature, and which must, to a great extent, remain so, unless the barrier in the St. Mary's river be overcome by the mode proposed."

It will be recollected that the forests on the borders of the upper lake may also be made sources of great wealth, and subjects of profitable investment and labor; but lumber cannot be manufactured and transported to market until the canal in question shall be com-

pleted.

The fisheries of this lake already employ many men, and the business awaits only the removal of this obstruction to increase many fold the quantity put up for market. The committee have no means of ascertaining the amount of the annual product of the fisheries on this lake; but, in a statement now before them, prepared with great care for the public eye, 22,500 barrels of fish, worth \$112,700, are stated to have been exported from this place and Mackinac in 1847. The facilities for an uninterrupted trans-

portation only are required to increase this branch of labor into an extensive and lucrative business.

Notwithstanding the many disadvantages of its isolated location, there are already several vessels and steamboats in the waters of Lake Superior, plying between its several ports and the falls at the outlet. Some of these were built above the falls, and others, at enormous expense, were transported overland around them, on tem-

porary ways laid upon the shore.

It will be recollected that the boundary line between the United States and Great Britain passes through the middle of the lake, leaving to that nation an extent of waters and of bordering territory equal to that on the American side. The same general characteristics of country and of resources are found in the territory of both nations. The developments of mineral wealth are the same on the British as on the American side, and have already become the subject of exploration and of mining operations. The imports and exports of the British portion of the entire region must also pass through the straits of St. Mary's. An actual survey has been made for a canal on the British side of the falls, where the land is favorable to the construction of the work, and the provincial government has had its construction in contemplation. It would seem to be due to our own interest to secure the advantages which the command of such a work—the key to so extensive a country, that which must control so many interests, and may become so essential for the preservation of our own national rights-will inevitably confer on the party which shall cause the work to be executed.

An examination and survey of the route for the canal was made by John Almy, esq., a competent engineer, under the State authorities, in 1837, and in 1848 another estimate of the cost of the work was made in accordance with a resolution of the United States Senate, under the direction of the Bureau of Topographical engineers. Mr. Almy estimated the cost \$112,544. This estimate is for a work of much smaller dimensions and less permanent in its character, than would be required to accommodate the increasing navigation of the lakes. The estimate made at the Topographical Bureau is for a larger and more permanent work, adapted to navigation by steam vessels of the largest class, and requiring the canal to be 100 feet wide and 12 feet deep, and the locks to be 200 feet long and fifty feet wide. The estimate for the total expense of such a work, constructed in the most permanent manner, with the necessary extensions into the waters above and below the terminating points of the canal, is stated in Colonel Abert's report at \$454,107 66. The fall to be overcome is 21 feet, which it is proposed to divide into three lifts, and the above estimate embraces double sets of locks. The length of the canal, as surveyed, is 4,560 feet.

The legislature of Michigan, unable for the want of means to prosecute the undertaking as a State work, yet aware of its great importance to the public interests, in 1847, granted a charter to a company for that purpose, reserving the right at any time to resume the work, on paying to the company the amount of their expenditures upon it, with interest. It is doubtful whether, under these

auspices, the canal will ever be constructed, and, in the opinion of the committee, the control of a work of so much importance should not be put out of the power of the public authorities. As the company has, as yet, made no expenditures under their charter, and the rights granted by it may, under its terms, be at once resumed by the State, the committee have deemed it most advisable to recommend that a cession of the right of way for the canal over the public land be made directly to the State, and that a grant of land, in some respects commensurate with the cost and importance of the

work, be made to the State, to aid in its construction.

The same principles which have authorized and sanctioned numerous grants to the States, for turnpikes, canals, and railroads, through, or leading to, the public domain, designed to promote the sales of government lands, to facilitate the settlement of a new country, to develope new resources of public wealth, and to open new fields for enterprising labor, apply, in the opinion of the committee, in the fullest extent, to this case. And when it is considered that the State of Michigan, a frontier State, and now for eleven years a member of the Union, has never, since the act by which she was admitted, with the exception of a small grant in comman with the other new States, received an acre of the public domain to aid in any work of internal improvement, while such grants have been made to most of the other new States; when it is recollected that her authorities early undertook to execute the work in question, and were prevented, first, by the troops of the United States, and subsequently, by the embarrassments of her treasury; when the interests of the United States, as the great owner of all the wealth within our territorials limits on the land and the water in that portion of the country, are regarded, the committee feel constrained earnestly to recommend the grant of 500,000 acres of land, as provided in the bill herewith reported.

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